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| 13. <i>Chlamys undulatus</i> , Sow. | 19. <i>Daphnella excavata</i> , Gatliff. |
| 14. <i>Cyclopecten Nepeanensis</i> , Pritch. & Gat. | 20. <i>Ancilla Potterdi</i> , Tate. |
| 15. <i>Modiola arborescens</i> , Chem. | 21. <i>Acanthochites glyptus</i> , Sykes. |
| 16. <i>M. Victoriae</i> , Pritch. & Gat. | 22. <i>Mitra Rossettæ</i> , Angus. |
| 17. <i>Scala Nepeanensis</i> , Gatliff. | 23. <i>Conus anemone</i> , Lam. (white variety). |
| 18. <i>S. translucida</i> , Gatliff. | 24. <i>Zenatia Victoriae</i> , Pritch. & Gat. |

Nos. 1-16 dredged in Western Port Bay; 17-21, Port Phillip Bay; 22-24, Ocean Beach.

Mr. Gabriel also exhibited *Cypræa xanthodon*, Gray, from Queensland, and *Cypræa decipiens*, E. A. Smith, from W. Australia.

By H. C. Fulton: A specimen of *Orthalicus* from Mexico, with a large pearl attached to the inner surface of the last whorl.

By E. A. Smith, I.S.O.: A collection of pearls and photographs of pearls obtained by Mr. Gordon Smith in Japan and China. These included true pearls from *Ivaliotis*, *Pecten*, *Pinna*, and *Mytilus*.

By Miss Foster: A deformed specimen of *Cypræa arabica*, with pronounced spire and distorted and thickened lip.

NOTES.

ON THE PAIRING OF *LIMNÆA PEREGER* WITH *PLANORBIS CORNEUS*. (Read 10th May, 1907.)—On April 14th, at about midday, a specimen of *Planorbis corneus* (Linnæus) was taken from a pond at Harrow, and on it was found a *Limnæa pereger* (Müller) in the act of pairing, the *Limnæa* acting male. The specimens were wrapped in weed, taken home, and placed together in a vessel of water. During the afternoon the *Limnæa* crawled about the shell of the *Planorbis*, and at about 4 o'clock they were again found to be pairing. The next day they were crawling about the vessel indifferent to each other, nor were they subsequently seen to pair. At the beginning of May the *Planorbis* laid a batch of eggs.

For records of pairing between different genera of snails see a note by E. Caziot, Proc. Malac. Soc., 1902, vol. v, No. 1, p. 11.

W. D. LANG.

NOTE ON AN 'OCTOPUS' WITH BRANCHING ARMS.—A specimen of an 'Octopus' has recently been brought from Japan by Mr. R. Gordon Smith, which is very remarkable on account of all the arms, with the exception of one of the dorsal pair, exhibiting one or more furcations. Records of similar abnormalities are extremely rare. It appears to be an abnormal specimen of *Polypus Cephea* (Gray). A descriptive account and figure of it will appear in another publication.

E. A. SMITH.

HOLOCENE MOLLUSCA FROM STAINES. (Read 10th May, 1907.)—Last year Messrs. Kennard & Woodward published a list of Holocene Mollusca from a deposit a mile or so west of Staines (Proc. Geologists' Assoc., vol. xix); those now shown were collected last Autumn close to

Staines Gasworks, where some excavations were in progress. They comprise :—

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| <i>Vitrea crystallina</i> (Müll.). | <i>L. stagnalis</i> (L.). |
| <i>V. nitidula</i> (Drap.). | <i>Amphipeplea glutinosa</i> (Müll.). |
| <i>Zonitoides nitidus</i> (Müll.). | <i>Planorbis corneus</i> (L.). |
| <i>Pyramidula rotundata</i> (Müll.). | <i>P. albus</i> , Müll. |
| <i>Hygromia hispida</i> (L.). | <i>P. Stroemi</i> , West. |
| <i>H. rufescens</i> (Penn.). | <i>P. crista</i> (L.). |
| <i>Vallonia pulchella</i> (Müll.). | <i>P. earinatus</i> , Müll. |
| <i>V. costata</i> (Müll.). | <i>P. umbilicatus</i> , Müll. |
| <i>V. excentrica</i> , Sterki. | <i>P. vortex</i> (L.). |
| <i>Helix nemoralis</i> , L. | <i>P. spirorbis</i> (L.). |
| <i>H. hortensis</i> , Müll. | <i>P. contortus</i> (L.). |
| <i>Cochlicopa lubrica</i> (Müll.). | <i>P. fontanus</i> (Lightfoot). |
| <i>Jamnia muscorum</i> (L.). | <i>Physa fontinalis</i> (L.). |
| <i>Vertigo pygmæa</i> (Drap.). | <i>Bithynia tentaculata</i> (L.). |
| <i>V. antivertigo</i> (Drap.). | <i>B. Leachii</i> (Shepp.). |
| <i>Clausilia laminata</i> (Mont.). | <i>Valvata piscinalis</i> (Müll.). |
| <i>Succinea putris</i> (L.). | <i>V. cristata</i> , Müll. |
| <i>S. elegans</i> , Risso. | <i>Neritina fluviatilis</i> (L.). |
| <i>Carychium minimum</i> , Müll. | <i>Sphærium corneum</i> (L.). |
| <i>Ancylus fluviatilis</i> , Müll. | <i>Pisidium amnicum</i> (Müll.). |
| <i>Aeroloxus lacustris</i> (L.). | <i>P. Henslowianum</i> (Shepp.). |
| <i>Limnæa auricularia</i> (L.). | <i>P. subtruncatum</i> , Malm. |
| <i>L. pereger</i> (Müll.). | <i>P. pulchellum</i> , Jenyns. |
| <i>L. palustris</i> (Müll.). | <i>P. pusillum</i> (Gmel.). |
| <i>L. truncatula</i> (Müll.). | <i>P. Gassiesianum</i> , Dupuy. |

The *Pisidia*, however, are not fully worked out, so quite possibly the remaining three British species are also represented.

Several species found by Messrs. Kennard & Woodward did not occur in this section; the only two species additional to their list are *Helix hortensis* and *Vallonia costata*. Perhaps the most interesting find was the one example of *Amphipeplea glutinosa*. J. E. COOPER.

NOTE ON THE OCCURRENCE OF PEARLS IN *HALIOTIS GIGANTEA* AND *PECTEN* SP.—Mr. R. Gordon Smith, who has recently returned from a visit to Japan, has presented various interesting zoological collections to the British Museum, and among them are the pearls now exhibited.

It is a well-known fact that pearls are produced by both Gastropods and Bivalves, and that they occur more frequently in the latter. They have already been recorded from the genera *Strombus*, *Turbinella*, *Haliotis*, *Margaritifera*, *Placuna*, *Malleus*, *Mytilus*, *Modiola*, *Pinna*, *Anomia*, *Ostrea*, *Spondylus*, *Arca*, *Tridacna*, *Hippopus*, *Donax*, *Tellina*, *Unio*, and *Anodonta*, and there does not appear to be any special reason why other genera of Pelecypoda should not be pearl-producing if infested by the larvæ of Cestode and other worms. I now have to record the occurrence of pearls in *Haliotis gigantea* and a species of *Pecten*. Experiments with regard to the artificial production of pearls in *Haliotis* have been made by M. Louis Boutan, but their actual natural occurrence in that genus has, I believe, only once been noted hitherto.¹ Some of the *Haliotis* pearls brought home by Mr. Gordon Smith are of beautiful lustre and very large, measuring as much as 24 millimetres ($1\frac{1}{8}$ inch) in length. They are often bean-shaped, and generally somewhat compressed. They are found in the *Haliotis gigantea* ('Awabi' of the Japanese), and

¹ J. Keep : Nautilus, 1890, vol. iv, p. 15.